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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/800,870

03/16/2004

Osamu Saito

1982-0210P

1571

2292 7590 06/08/2007  
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EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

06/08/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/800,870	<b>Applicant(s)</b> SAITO, OSAMU	
	<b>Examiner</b> LUONG T. NGUYEN	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 is/are allowed.
- 6) ☒ Claim(s) 9-13 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/16/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Objections*

2. Claims 1-8 are objected to because of the following informalities:

Claim 1 (lines 8-9), "the photographing signal processing" should be changed to --the predetermined photographing signal processing--.

Claim 1 (line 11), "the photographing signal processing unit" should be changed to --the photographing signal processing units--.

Claim 10 (line 4), "the recording media" should be changed to --a recording media--.

Claim 11 (lines 2-3), "predetermined analog signal processing" should be changed to --the predetermined analog signal processing--.

Claim 11 (lines 5-6), "the CCD image sensor. Thereafter the analog image signal" should be changed to -- the CCD image sensor; thereafter the analog image signal--.

Claim 12 (line 2), "the predetermined plurality of processors" should be changed to --the plurality of processors--.

Claims 2-8 are objected as being dependent on claim 1.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitajima (US 7,184,077) in view of Morinaka et al. (US 7,148,926).

Regarding claim 9, Kitajima discloses a digital camera comprising:

an optical unit including a lens (lens unit 10, figure 1, column 2, lines 40-67) for forming an object a drive circuit for driving the optical unit; a CCD image sensor (CCD 40, figure 1, column 2, lines 40-67), arranged behind the optical unit along an optical axis thereof;

an analog front end (signal processing section 60, figure 1, column 2, lines 40-67), connected to the CCD image sensor, for controlling the drive of the CCD image sensor and performing predetermined analog signal processing to an output signal expressing the object image and read from the CCD image sensor;

a digital computing processing unit (combination of image signal processing section 70, central control section 140, compression/multiplex section 100, figure 1, column 2, lines 40-67), connected to an output end of the analog front end, constituted by a plurality of processors, for performing predetermined digital signal processing to image data.

Kitajima fails to disclose a CCD image sensor for photographing the object image at a level of at least ten million pixels. However, Morinaka et al. discloses a CCD image sensing elements, which has more than 10 million pixels (column 1, lines 40-45). Therefore, it would

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have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Kitajima by the teaching Morinaka et al. in order to realize image sensing with ever higher resolutions (column 1, lines 40-41).

Regarding claim 10, Kitajima discloses a media interface (external memory IF 130, figure 1, column 3, lines 1-13) for controlling reading/writing of various data from/in the recording media (detachable external memory 2, figure 1, column 3, lines 1-13);

a display monitor (picture display section 85, figure 1, column 2, lines 40-67) for displaying an image obtained by photographing or for displaying various types of information;

an operation unit operated by a photographer (manipulating section 150, figure 1, column 3, lines 5-8);

an external output interface (communication interface IF 110, figure 1, column 2, lines 64-67; column 3, lines 27-36) for outputting image data to an external device connected through a predetermined cable.

Regarding claim 11, Kitajima discloses wherein the analog front end performs predetermined analog signal processing including at least one of a correlative double sampling process (signal processing section 60 performs correlation double sampling, column 2, lines 40-67) and sensitivity adjustment in units of RGB colors to an analog image signal input from the CCD image sensor. Thereafter the analog image signal is A/D converted to be output as a digital image signal (column 2, lines 40-67).

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Regarding claim 12, Kitajima discloses wherein one of the predetermined plurality of processors instructs another processor of the plurality of processors to capture a digital image signal (the central control section 140 instruct image processing section 70 to capture a digital image, figure 1).

Regarding claim 13, Kitajima discloses a timing generator, connected to the plurality of processors, for supplying timing signals to the plurality of processors (a timing generator is inherently included in the digital camera 1 for supplying timing signals to the plurality of processors).

***Allowable Subject Matter***

5. Claims 1-8 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, the prior art of the record fails to show or fairly suggest a digital camera which causes an image pickup element to photograph an object to obtain image data expressing an object image comprising wherein the photographing signal processing units, for the photographing signal processing in regions assigned by the photographing signal processing units, capture the image data such that each of the photographing signal processing unit and another photographing signal processing unit which have adjacent assigned regions are at least partially overlapped.

Claims 2-8 are allowed for the reason given in claim 1.

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6. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Safai (US 6,642,956) discloses digital image processor for a digital camera.

Hsieh et al. (US 6,757,019) discloses low-power parallel processor and imager having peripheral control circuitry.

Kubo (US 6,992,711) discloses digital camera with plurality of media for recording captured images.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LN  
5/29/07



**LUONG T. NGUYEN**  
**PATENT EXAMINER**